

WHAT IS CLAIMED IS:

- 1 1. In a computer system having at least one
2 repository of a first type and at least one software
3 modeling tool of a second type coupled together in a
4 distributed heterogeneous environment, a method for
5 effecting data interchange among software tools and
6 repositories in said environment, said method comprising
7 the steps of:
8 a. registering and storing said metadata
9 describing a meta model in said repository;
10 b. generating a set of rules and streams of
11 data based on said rules;
12 c. generating documents conforming to each of
13 said metamodels by reading said set of rules;
14 d. writing an importer for use in importing
15 into said repository said streams of data; and,
16 e. writing an exporter for use in exporting
17 from said repository said streams of data.
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- 1 2. The system as in Claim 1 wherein said
2 repository of a first type is MOF-based.
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- 1 3. The system as in Claim 1 wherein said software
2 tool of a second type is UML-based.
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- 1 4. The system as in Claim 1 wherein said rules
2 are XML Document Type Definitions.
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- 1 5. The system as in Claim 1 wherein said streams
2 of data are XML Metadata Interchange.

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1 6. A storage medium encoded with machine-readable
2 computer program code for effecting data interchange
3 among software tools and repositories in a distributed
4 heterogeneous environment, wherein, when the computer
5 program code is executed by a computer system having at
6 least one repository of a first type and at least one
7 software tool of a second type, the computer performs the
8 steps of:

9 a. registering and storing said metadata
10 describing a meta model in said repository;

11 b. generating a set of rules and streams of
12 data based on said rules;

13 c. generating documents conforming to each of
14 said metamodels by reading said set of rules;

15 d. writing an importer for use in importing
16 into said repository said streams of data; and,

17 e. writing an exporter for use in exporting
18 from said repository said streams of data.

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1 7. The storage medium as in Claim 6 wherein said
2 repository of a first type is MOF-based.

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1 8. The storage medium as in Claim 6 wherein said
2 software tool of a second type is UML-based.

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1 9. The storage medium as in Claim 6 wherein said
2 rules are XML Document Type Definitions.

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1 10. The storage medium as in Claim 6 wherein said
2 streams of data are XML Metadata Interchange.

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11. In a computer system having at least one MOF-based repository and at least one UML-based software modeling tool coupled together in a distributed heterogeneous environment, a method for effecting data interchange among software tools and repositories in said environment by generating XML Document Type Definitions ("DTDs") and XMI streams, said method comprising the steps of:
- a. registering and storing said metadata describing a UML-based meta model in said MOF-based repository;
 - b. generating XML DTDs of said UML-based metamodel;
 - c. generating XML documents conforming to each of said UML-based metamodels by reading said XML DTDs;
 - d. writing an importer for use in importing into said MOF-based repository said XMI streams; and,
 - e. writing an exporter for use in exporting from said repository said XMI streams.

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